

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 W. JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604-3590

Reply to the Attention Of: SR-6J

August 28, 2006

Via E-mail and Mail

Dr. Rainer Domalski
Rutgers Organics Corporation
201 Struble Road
State College, PA 16801-7488
Fax: 814.238.1567

RE: Revised Pre-Design Investigation Work Plan for Operable Unit 2
Nease Chemical Site, Salem, Ohio

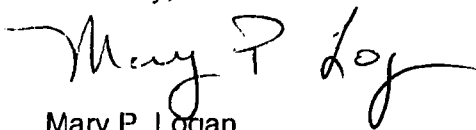
Dear Fainer:

EPA and Ohio EPA (the Agencies) have reviewed Revision 1 to the *Pre-Design Investigation Work Plan, Operable Unit 2, Nease Chemical Site, Salem, Ohio*, dated August 2006 (PDI Work Plan). Overall, the revised draft addresses most of the Agencies' comments provided on the May 2006 draft PDI Work Plan. Therefore, pursuant to paragraph 41(b) of the Remedial Design Settlement Agreement, EPA is conditionally approving the revised PDI Work Plan. The conditions for approval are attached. EPA is authorizing all of the work to proceed, subject to any relevant attached condition.

Once again, thanks to you and your team for the quality and timeliness of this work, and the cooperative spirit with which it has been conducted. The Agencies look forward to the implementation of the plan.

Please call me at (312) 886-4599 if you have any questions or require clarification.

Sincerely,



Mary P. Logan
Remedial Project Manager

cc via email: S. Finn, Golder Associates, Inc.
S. Abraham, Ohio EPA (and hard copy)
M. Mankowski, U.S. EPA

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Approval Conditions on Revision 1 Pre-Design Investigation Work Plan
Operable Unit 2
Nease Chemical Company, Salem, Ohio
Dated August 2006

1. Please submit a "final" PDI Work Plan within 30 days, incorporating the changes proposed in the August revision, plus the specific language changes requested below.
2. Southern area background well(s): The Agencies' (June 28, 2006) review comment #14 stated, "The proposed list of wells to be sampled (Table 1) is a comprehensive list that will be useful in establishing a baseline for the study. Monitoring wells S-9 and/or PZ-5M would allow a better characterization of ground water quality beneath background/upgradient areas near the Southern plume. The Agencies recommend wells S-9 and/or PZ-5M be added to the list." In the cover letter response, ROC stated that upgradient wells I-S and I-UBA are in the sampling program and will provide information on upgradient conditions. S-9 and/or PZ-5M are therefore not included in the list of wells to be sampled in the tables, or in Figure 2. However, the revised text in Section 2.1.3 on the activities planned for the Southern Groundwater Assessment states that "Samples...from one upgradient background well (S-9) will be collected and analyzed." Please clarify whether S-9 or another upgradient background well in the southern area will be sampled.

Note that while wells I-S and I-UBA are hydraulically appropriate as background wells for the overall OU 2, the Agencies do not consider them to be the closest hydraulically upgradient wells to the southern ground water contamination. However, the addition of the temporary wells that are being installed as part of the PDI may be satisfactory to evaluate upgradient conditions in this area. If this is not the case, additional upgradient background data may be needed to support the remedial design.

3. Temporary Well Sampling: Since the revised work plan was submitted, there has been a proposed change to the approach to sampling the temporary wells. The Agencies were contacted verbally, and by email on August 24 asking to omit the low flow pumps and use bailers for the temporary wells. The Agencies will allow the use of bailers for the temporary wells. However, the proposed protocol did not follow Ohio EPA's TGD because there is no proposed well development. The Agencies require an attempt to develop the wells – remove three well volumes if possible before sampling to remove any drilling debris from the wells that could give false hits from well materials or drilling equipment. In the final work plan please show the change in temporary well sampling method, including well development.
4. General Information: In the Agencies' (June 28, 2006) review comment #8 we requested some additional background information on the treatment technologies. In the revision you included information on S/S/S, but omitted information on NZVI. Please include some NZVI background as well.
5. In-Situ Trench Hydraulic Testing, Section 3.1.5.1 (Page 31): The response to the Agencies' comment #43 is a little confused. Contrary to the response ("water levels will be monitored downgradient of the trench in two piezometers"), the work plan text and the corresponding Figure 3 both indicate that there will be two upgradient piezometers near the test trench with one downgradient. That arrangement, coupled with the piezometer in the trench, should be adequate for determining water levels near the trench. Please ensure that the final work plan maintains the current text and are not changed to reflect the comment response.

6. Schedule: The proposed submittal dates for the three technical memoranda are acceptable. The proposed date for submittal of the RD Work Plan is tentatively acceptable. As the work progresses, EPA expects the parties to look for opportunities to streamline the design process to allow remedy implementation as soon as possible.
7. Missing elements: Please provide all missing elements, (including those for which there were no changes from those provided in the May 2006 draft PDI) in the final document.

LANGUAGE CHANGES:

8. Design Objectives, Section 2.4.1.2 (Page 13): The 2nd sentence of the 1st paragraph was revised to address the Agencies comment #33 and now states that "chemical concentrations in soil measured in Former Ponds 1 and 2..." Please delete "in soil".
9. Southern Groundwater Assessment, Section 3.1.3.1 (Page 28): While Ohio EPA is willing to facilitate interviews/ inspections at the off-property residences to gather information to help evaluate off-property ground water impacts and/ or the vapor intrusion pathway, the Agency cannot commit to conducting the necessary interviews/ inspections. Please revise the last sentence of the 2nd full paragraph on page 28 to "...representatives from Ohio EPA will facilitate conducting interviews/ inspections..."
10. NZVI Field Study, Section 3.4.2.2 (Page 52): The Agencies' comment #57 called for stating in this section that the injection wells would be flushed with pure water for a hour after NZVI slurry injection. That change has been made in Appendix E, but not in the text of Section 3.4.2.2. Please make the change in both places.
11. NZVI Pilot Studies, Preliminary Bench Studies, Section 3.4.2.1 (Page 51): Please add vinyl chloride to footnote 13 (i.e. revise as follows- "The following VOCs will be analyzed: PCE....and related breakdown products including vinyl chloride.")